Cryptocephalus (Burlinius) chafarinensis n. sp. from the Mediterranean northwest Africa (Coleoptera: Chrysomelidae: Cryptocephalinae)

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Abstract. Cryptocephalus (Burlinius) chafarinensis n. sp. from the Chafarinas Archipelago, close to the Mediterranean coast of Morocco, is described and illustrated. It is clearly separated from most other Moroccan species of Burlinius by the male genitalia, while its trophic affiliation on Pistacia lentiscus (Anacardiaceae) is also shared by two Balearic species of this subgenus.

Key words: entomology, taxonomy, Cryptocephalus (Burlinius) chafarinensis n. sp., Coleoptera Chrysomelidae, Cryptocephalinae, faunistics, chorology.

INTRODUCTION

The Chafarinas Archipelago consists of three small main islands located in the Western Mediterranean (35° 11’ 00” N-2° 25’ 35” W), very close to the Cape of Ras el Ma, 4 km off the eastern coast of Mediterranean Morocco. Some years after the publication of a preliminary study on their biodiversity (Yus and Cabo 1986), a small group of Spanish naturalists from the IMDEEA made two collecting trips to these islands in spring and autumn 1998 with the aim to obtain more data on invertebrate faunistics that have been the subject of two papers, one devoted to Insecta, Coleoptera (Palmer et al. 1999), and another on Crustacea, Isopoda (Pons et al. 1999). The specimens captured on the island of Congreso, the largest one (25.6 ha.) of the Archipelago, included seven individuals of a species of Cryptocephalus, that after careful study, proved to be a new species (Palmer et al. 1999), whose description is given below.
*Cryptocephalus (Burlinus) chafarinensis* n. sp.

**Etymology**
From its geographic source in the Isles Chafarinas (Spain), where this species has been found.

**Description**
Length: 2.25 mm. Width: 1.15 mm. Body cylindrical and subparallel, patched in brown and yellow, with black basal margins of pronotum and elytra, and yellow epipleura.

Head vertical, clypeus and frons punctured and covered with sparse recumbent white setae; eyes slightly emarginate internally; vertex with two large round yellow spots; antennae yellow in the basal half, testaceous apically.

Pronotum transverse and highly convex, glabrous and shining, lateral margins not entirely visible simultaneously from above, surface punctured very finely and sparsely; scutellum yellow with black margins.

Legs long and robust, uniformly yellow-testaceous; some of last tarsomeres slightly darkened.

Elytra convex, subparallel and glabrous, humeri distinct, each elytron with nine longitudinal rows of regular punctures plus a shorter presutural pair; elytral epipleura narrowed and disappearing towards half elytron length, only visible from lateral view.

1, 2. *Cryptocephalus chafarinensis*: 1 – aedeagus in dorsal (1a), ventral (1b), and lateral views (1c); 2 – spermatheca
CryPtoCePhalus Chaf arinensis N. SP. FRoM tHE NoRtHEasteRn AFRICA

Ventral surfaces dark brown, the abdomen covered with long, recumbent, and quite densely distributed white setae.

Aedeagus (figs. 1a, 1b, and 1c) almost straight, slightly expanded towards the apex, with two instead of three apical processes, lacking the central lobe characteristically present in most other Mediterranean Burlinius.

Spermatheca (fig. 2) triangular shaped with the distal part longer and narrower than the basal part.

SPECIES VARIABILITY

This species has a remarkable chromatic polymorphism of the pronotum and elytra. One studied specimen has the elytra almost completely yellow except for diffuse brown basal marks, another has both the pronotum and the elytra almost black, the remaining four individuals display a variable pattern of brown spots on the elytral yellow background and a less heterogeneous pattern of brown pronotum, with an apical yellow transversal band and a mid narrow longitudinal line of the same colour.

TYPE MATERIAL


DIFFERENTIAL DIAGNOSIS AND BIOLOGY

Warchalowski (1999, 2003) has listed eleven species of the subgenus Burlinius from the Mediterranean part of North Africa, but their male genitalia show three apical processes clearly differentiating them from C. chafarinensis with two processes. From this geographical region only C. saucius Truqui, a species widely distributed in western Mediterranean, shares this characteristic. However, the latter can be distinguished from C. chafarinensis by its blue metallic sheen (also showing a remarkable chromatic polymorphism), white scutellum, strikingly different aedeagus and its much larger size (3.00-3.75 mm.).

The host-plant of C. chafarinensis is the Anacardiaceae, Pistacia lentiscus (L.) (Palmer et al. 1999), a trophic affiliation which is also shared at least by two other species of Cryptocephalus (Burlinius) in Balearic Islands (Petitpierre 2000). Finally, although C. chafarinensis should be presently considered as an endemic species, the geographic closeness of the Chafarinas Archipelago to the Morocco coast makes it very feasible to be found in the neighbouring mainland when further faunistics data become available.

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REFERENCES


